Subpart E—Frequencies

§ 87.169 Scope.

This subpart contains class of station symbols and a frequency table which lists assignable frequencies. Frequencies in the Aviation Services will transmit communications for the safe, expeditious, and economic operation of aircraft and the protection of life and property in the air. Each class of land station may communicate in accordance with the particular sections of this part which govern these classes. Land stations in the Aviation Services in Alaska may transmit messages concerning sickness, death, weather, ice conditions or other matters relating to safety of life and property if there is no other established means of communications between the points in question and no charge is made for the communications service.

[69 FR 32882, June 14, 2004]

§ 87.171 Class of station symbols.

The two or three letter symbols for the classes of station in the aviation services are:

Symbol and class of station

AX—Aeronautical fixed
AXO—Aeronautical operational fixed
DGP—Differential GPS
FA—Aeronautical land (unspecified)
FAU—Aeronautical advisory (unicom)
FAC—Airport control tower
FAE—Aeronautical enroute
FAM—Aeronautical multicom
FAP—Civil Air Patrol
FAR—Aeronautical search and rescue
FAS—Aviation support
FAT—Flight test
FAW—Automatic weather observation
GCO—Ground Communication Outlet
MA—Aircraft (Air carrier and Private)
MA1—Air carrier aircraft only
MA2—Private aircraft only
MOU—Aeronautical utility mobile
MRT—ELT test
RCO—Remote Communications Outlet
RL—Radionavigation land (unspecified)
RLA—Marker beacon
RLB—Radiobeacon
RLD—RADAR/TEST
RLG—Glide path
RLL—Localizer
RLO—VHF omni-range
RLS—Surveillance radar
RLT—Radionavigation land test
RLW—Microwave landing system
RNV—Radio Navigation Land/DME
RPC—Ramp Control
TJ—Aircraft earth station in the Aeronautical Mobile-Satellite Service
UAT—Universal Access Transceiver

[53 FR 28940, Aug. 1, 1988, as amended at 57 FR 45750, Oct. 5, 1992; 64 FR 27475, May 20, 1999; 69 FR 32882, June 14, 2004; 71 FR 70676, Dec. 6, 2006]

§ 87.173 Frequencies.

(a) The table in paragraph (b) of this section lists assignable carrier frequencies or frequency bands.

(1) The single letter symbol appearing in the ''Subpart'' column indicates the subpart of this part which contains additional applicable regulations.

(2) The two or three letter symbol appearing in the ''Class of Station'' column indicates the class of station to which the frequency is assignable.

(b) Frequency table:

Frequency or frequency band	Subpart	Class of station	Remarks
90–110 kHz	Q	RL	LORAN ''C''.
190–285 kHz	Q	RLB	Radiobeacons.
200–285 kHz	O	FAC	Air traffic control.
325–405 kHz	O	FAC	Air traffic control.
325–435 kHz	Q	RLB	Radiobeacons.
410.0 kHz	F	MA	International direction-finding for use outside of United States.
457.0 kHz	F	MA	Working frequency for aircraft on over-water flights.
500.0 kHz	F	MA	International calling and distress frequency for ships and aircraft on over-water flights.
510–535 kHz	Q	RLB	Radiobeacons.
2182.0 kHz	F	MA	International distress and calling.
2648.0 kHz	I	AX	Alaska station.
2850.0–3025.0 kHz	I	MA, FAE	International HF.
2851.0 kHz	I, J	MA, FAE, FAT	International HF; Flight Test.
2866.0 kHz	I	MA, FAE	Domestic HF; (Alaska).
2875.0 kHz	I	MA, FAE	Domestic HF.
2878.0 kHz	I	MA1, FAE	Domestic HF; International HF.
2911.0 kHz	I	MA, FAE	Domestic HF.
2956.0 kHz	I	MA, FAE	Domestic HF.
3004.0 kHz	I, J	MA, FAE, FAT	International HF; Flight Test.
3019.0 kHz	I	MA1, FAE	Domestic HF; International HF.
3023.0 kHz	F, M, O	MA1, FAR, FAC	Search and rescue communications.
3281.0 kHz	K	MA, FAS	Lighter-than-air craft and aeronautical stations serving lighter-than-air craft.
3400.0–3500.0 kHz	I	MA, FAE	International HF.
3434.0 kHz	I	MA1, FAE	Domestic HF.
3443.0 kHz	J	MA, FAT	Flight Test.
3449.0 kHz	I	MA, FAE	Domestic HF.
3470.0 kHz	I	MA, FAE	Domestic HF; International HF.
4125.0 kHz	F	MA	Distress and safety with ships and coast stations.
4550.0 kHz	I	AX	Gulf of Mexico.
4645.0 kHz	I	AX	Alaska.
4650.0–4700.0 kHz	I	MA, FAE	International HF.
4672.0 kHz	I	MA1, FAE	Domestic HF.
4947.5 kHz	I	AX	Alaska.
5036.0 kHz	I	AX	Gulf of Mexico.
5122.5 kHz	I	AX	Alaska.
5167.5 kHz	I	FA	Alaska emergency.
5310.0 kHz	I	AX	Alaska.
5450.0–5680.0 kHz	I	MA, FAE	International HF.
5451.0 kHz	J	MA, FAT	Flight Test.
5463.0 kHz	I	MA1, FAE	Domestic HF.
5469.0 kHz	J	MA, FAT	Flight Test.
5472.0 kHz	I	MA, FAE	Domestic HF.
5484.0 kHz	I	MA, FAE	Domestic HF.
5490.0 kHz	I	MA, FAE	Domestic HF.
5496.0 kHz	I	MA, FAE	Domestic HF.
5508.0 kHz	I	MA1, FAE	Domestic HF.
5571.0 kHz	J	MA, FAT	Flight Test.

5631.0 kHz	I	MA, FAE	Domestic HF.
5680.0 kHz	F, M, O	MA1, FAC, FAR	Search and rescue communications.
5887.5 kHz	I	AX	Alaska.
6525.0–6685.0 kHz	I	MA, FAE	International HF.
6550.0 kHz	J	MA, FAT	Flight Test.
6580.0 kHz	I	MA, FAE	Domestic HF.
6604.0 kHz	I	MA, FAE	Domestic HF.
8015.0 kHz	I	AX	Alaska.
8364.0 kHz	F	MA	Search and rescue communications.
8815.0–8965.0 kHz	I	MA, FAE	International HF.
8822.0 kHz	J	MA, FAT	Flight Test.
8855.0 kHz	I	MA, FAE	Domestic HF; international HF.
8876.0 kHz	I	MA, FAE	Domestic HF.
10005.0–10100.0 kHz	I	MA, FAE	International HF.
10045.0 kHz	J	MA, FAT	Flight Test.
10066.0 kHz	I	MA, FAE	Domestic HF; international HF.
11275.0–11400.0 kHz	I	MA, FAE	International HF.
11288.0 kHz	J	MA, FAT	Flight Test.
11306.0 kHz	J	MA, FAT	Flight Test.
11357.0 kHz	I	MA, FAE	Domestic HF.
11363.0 kHz	I	MA, FAE	Domestic HF.
13260.0–13360.0 kHz	I	MA, FAE	International HF.
13312.0 kHz	I, J	MA, FAE, FAT	International HF; Flight Test.
17900.0–17970.0 kHz	I	MA, FAE	International HF.
17964.0 kHz	J	MA, FAT	Flight Test.
21924.0–22000.0 kHz	I	MA, FAE	International HF.
21931.0 kHz	J	MA, FAT	Flight Test.
72.020–75.980 MHz	P	FA, AXO	Operational fixed; 20 kHz spacing.
75.000 MHz	Q	RLA	Marker beacon.
108.000 MHz	Q	RLT	
108.000–117.950 MHz	Q	RLO	VHF omni-range.
108.000–117.975 MHz	Q	DGP	Differential GPS.
108.050 MHz	Q	RLT	
108.100–111.950 MHz	Q	RLL	ILS Localizer.
108.100 MHz	Q	RLT	
108.150 MHz	Q	RLT	
118.000–121.400 MHz	O	MA, FAC, FAW, GCO, RCO, RPC.	25 kHz channel spacing.
121.500 MHz	G, H, I, J, K, M, O	MA, FAU, FAE, FAT, FAS, FAC, FAM, FAP.	Emergency and distress.
121.600–121.925 MHz	O, L, Q	MA, FAC, MOU, RLT, GCO, RCO, RPC.	25 kHz channel spacing.
121.950 MHz	K	FAS	
121.975 MHz	F	MA2, FAW, FAC, MOU	Air traffic control operations.
122.000 MHz	F	MA, FAC, MOU	Air carrier and private aircraft enroute flight advisory service provided by FAA.
122.025 MHz	F	MA2, FAW, FAC, MOU	Air traffic control operations.
122.050 MHz	F	MA, FAC, MOU	Air traffic control operations.
122.075 MHz	F	MA2, FAW, FAC, MOU	Air traffic control operations.
122.100 MHz	F, O	MA, FAC, MOU	Air traffic control operations.
122.125–122.675 MHz	F	MA2, FAC, MOU	Air traffic control operations; 25 kHz spacing.

Frequency or frequency band	Subpart	Class of station	Remarks
122.700 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
122.725 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
122.750 MHz	F	MA2	Private fixed wing aircraft air-to-air communications.
122.775 MHz	K	MA, FAS	
122.800 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
122.825 MHz	I	MA, FAE	Domestic VHF.
122.850 MHz	H, K	MA, FAM, FAS	
122.875 MHz	I	MA, FAE	Domestic VHF.
122.900 MHz	F, H, L, M	MA, FAR, FAM, MOU	
122.925 MHz	H	MA2, FAM.	
122.950 MHz	G, L	MA, FAU, MOU	Unicom at airports with control tower; Aeronautical utility stations.
122.975 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
123.000 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
123.025 MHz	F	MA2	Helicopter air-to-air communications; Air traffic control operations.
123.050 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
123.075 MHz	G, L	MA, FAU, MOU	Unicom at airports with no control tower; Aeronautical utility stations.
123.100 MHz	M, O	MA, FAC, FAR	
123.125 MHz	J	MA, FAT	Itinerant.
123.150 MHz	J	MA, FAT	Itinerant.
123.175 MHz	J	MA, FAT	Itinerant.
123.200 MHz	J	MA, FAT	
123.225 MHz	J	MA, FAT	
123.250 MHz	J	MA, FAT	
123.275 MHz	J	MA, FAT	
123.300 MHz	K	MA, FAS	
123.325 MHz	J	MA, FAT	
123.350 MHz	J	MA, FAT	
123.375 MHz	J	MA, FAT	
123.400 MHz	J	MA, FAT	Itinerant.
123.425 MHz	J	MA, FAT	
123.450 MHz	J	MA, FAT	
123.475 MHz	J	MA, FAT	
123.500 MHz	K	MA, FAS	
123.525 MHz	J	MA, FAT	
123.550 MHz	J	MA, FAT	
123.575 MHz	J	MA, FAT	
123.6–128.8 MHz	O	MA, FAC, FAW, GCO, RCO, RPC	25 kHz channel spacing.
128.825–132.000 MHz	I	MA, FAE	Domestic VHF; 25 kHz channel spacing.
132.025–135.975 MHz	O	MA, FAC, FAW, GCO, RCO, RPC	25 kHz channel spacing.
136.000–136.400 MHz	O, S	MA, FAC, FAW, GCO, RCO, RPC	Air traffic control operations; 25 kHz channel spacing.
136.425 MHz	O, S	MA, FAC, FAW, GCO, RCO, RPC	Air traffic control operations.
136.450 MHz	O, S	MA, FAC, FAW, GCO, RCO, RPC	Air traffic control operations.

136.475 MHz	O, S	MA, FAC, FAW, GCO, RCO, RPC	Air traffic control operations.
136.500–136.875 MHz	I	MA, FAE	Domestic VHF; 25 kHz channel spacing.
136.900 MHz	I	MA, FAE	International and Domestic VHF.
136.925 MHz	I	MA, FAE	International and domestic VHF.
136.950 MHz	I	MA, FAE	International and domestic VHF.
136.975 MHz	I	MA, FAE	International and domestic VHF.
156.300 MHz	F	MA	For communications with ship stations under specific conditions.
156.375 MHz	F	MA	For communications with ship stations under specific conditions; Not authorized in New Orleans Vessel traffic service area.
156.400 MHz	F	MA	For communications with ship stations under specific conditions.
156.425 MHz	F	MA	For communications with ship stations under specific conditions.
156.450 MHz	F	MA	For communications with ship stations under specific conditions.
156.625 MHz	F	MA	For communications with ship stations under specific conditions.
156.800 MHz	F	MA	Distress, safety and calling frequency; For communications with ship stations under specific conditions.
156.900 MHz	F	MA	For communications with ship stations under specific conditions.
157.425 MHz	F	MA	For communications with commercial fishing vessels under specific conditions except in Great Lakes and St. Lawrence Seaway Areas.
243.000 MHz	F	MA	Emergency and distress frequency for use of survival craft and emergency locator transmitters.
328.600–335.400 MHz	Q	RLG	ILS glide path.
334.550 MHz	Q	RLT	
334.700 MHz	Q	RLT	
406.0–406.1 MHz	F, G, H, I, J, K, M, O	MA, FAU, FAE, FAT, FAS, FAC, FAM, FAP.	Emergency and distress.
960–1215 MHz	F, Q	MA, RL, RNV	Electronic aids to air navigation.
978.000 MHz	F, L, Q	MA, MOU, UAT	Universal Access Transceivers.
	UAT	.	
	Q	RLT	
979.000 MHz	Q	RLT	
1030.000 MHz	Q	RLT	
1104.000 MHz	Q	RLT	
1300–1350 MHz	F, Q	MA, RLS	Surveillance radars and transponders.
1435–1525 MHz	F, J	MA, FAT	Aeronautical telemetry and telecommand operations.
1559–1610 MHz	Q	DGP	Differential GPS.
1559–1626.5 MHz	F, Q	MA, RL	Aeronautical radionavigation.
1646.5–1660.5 MHz	F	TJ	Aeronautical Mobile-Satellite (R).
2310–2320 MHz	J	MA, FAT	Aeronautical telemetry and telecommand operations.
2345–2395 MHz	J	MA, FAT	Aeronautical telemetry and telecommand operations.
2700–2900 MHz	Q	RLS, RLD	Airport surveillance and weather radar.
4200–4400 MHz	F	MA	Radio altimeters.
5000–5250 MHz	Q	MA, RLW	Microwave landing systems.
5031.000 MHz	Q	RLT	
5350–5470 MHz	F	MA	Airborne radars and associated airborne beacons.
8750–8850 MHz	F	MA	Airborne doppler radar.
9000–9200 MHz	Q	RLS, RLD	Land-based radar.
9300–9500 MHz	F, Q	MA	Airborne radars and associated airborne beacons.
13250–13400 MHz	F	MA	Airborne doppler radar.
15400–15700 MHz	Q	RL	Aeronautical radionavigation.

Frequency or frequency band	Subpart	Class of station	Remarks
24750–25050 MHz	F, Q	MA, RL	Aeronautical radionavigation.
32300–33400 MHz	F, Q	MA, RL	Aeronautical radionavigation.

[53 FR 28940, Aug. 1, 1988]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §87.183, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

Subpart F—Aircraft Stations

§ 87.185 Scope of service.

(a) Aircraft stations must limit their communications to the necessities of safe, efficient, and economic operation of aircraft and the protection of life and property in the air, except as otherwise specifically provided in this part. Contact with an aeronautical land station must only be attempted when the aircraft is within the serivce area of the land station. however, aircraft stations may transmit advisory information on air traffic control, unicom or aeronautical multicom frequencies for the benefit and use of other stations monitoring these frequencies in accordance with FAA recommended traffic advisory practices.

(b) Aircraft public correspondence service must be made available to all persons without discrimination and on reasonable demand, and must communicate without discrimination with any public coast station or mobile-satellite earth station authorized to provide aircraft public correspondence service.

(c) Aircraft public correspondence service on maritime mobile frequencies may only be carried by aircraft stations licensed to use maritime mobile frequencies and must follow the rules for public correspondence in part 80.

(d) Aircraft public correspondence service on Aeronautical Mobile-Satellite (R) Service frequencies may only be carried on aircraft earth stations licensed to use Aeronautical Mobile-Satellite (R) frequencies and are subject to the rules for public correspondence in this part. Aircraft public correspondence service on Maritime Mobile-Satellite Service frequencies may only be carried by aircraft earth stations licensed to use Maritime Mobile-Satellite frequencies and are subject to the rules for public correspondence in part 80.

[53 FR 28940, Aug. 1, 1988, as amended at 57 FR 45750, Oct. 5, 1992]

§ 87.187 Frequencies.

(a) Frequencies used for air-ground Communications are listed in subpart E. Aircraft stations may use frequencies assigned to Government or non-Government aeronautical stations or radionavigation land stations if the communications are within the aeronautical or radionavigation land station scope of service.

(b) 410 kHz is the international direction-finding frequency for use outside the continental United States.

(c) 457 kHz is an authorized working frequency for flights over the high seas.

(d) 500 kHz an international calling and distress frequency for aircraft on flights over the high seas. Except for distress, urgency or safety messages an aircraft station must not transmit on 500 kHz during the silence periods for three minutes twice each hour beginning at x h. 15 and x h.45 Coordinated Universal Time (u.t.c.).

(e) The frequency 2182 khz is an international distress and calling frequency for use by ship, aircraft and survival craft stations. Aircraft stations must use J3E emission when operating on 2182 kHz and communicating with domestic public and private coast stations. The emission H3E may be used when communicating with foreign coast and ship stations.

(f) The frequencies 3023 kHz, 5680 kHz, 122.900 MHz and 123.100 MHz are authorized for use by aircraft engaged in seach and rescue activities in accordance with subpart M. These frequencies may be used for air-air and air-ground communications.

(g) The frequency 4125 kHz may be used for distress and safety communications between aircraft and ship and coast maritime mobile stations.

(h) The frequency 8364.0 kHz is authorized for use of survival craft for search and rescue communications with stations in the maritime mobile service.

(i) The frequencies in the band 121.975–122.675 MHz are authorized for